

# Markets for reef fishes

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Groupers and snappers are categorized as reef fishes together with sea breams, rock cods and coral cods in the major Asian markets — Hong Kong, Singapore, Japan and the US.

## Hong Kong

The live reef fish market in Hongkong accounted for about US\$35 million of live fish imports in the mid-1990s. The average wholesale price was about US\$23 per kg. This makes Hongkong the major importer in Southeast Asia, accounting for about 60% of the total annual regional trade of 25,000 tons. Live reef fishes are flown in from Indonesia, the Maldives, Australia and the western Pacific.

Groupers were also among the most valuable species. For example, in 1996, several large giant groupers (45-90 cm) were sold for about US\$10,000 each, a price comparable to silver. But majority of the live reef fish largely fall within sizes of 0.5 to 2.0 kg or 35 to 50 cm. Grouper price vary according to species. Red grouper (*Epinephelus akaara*) and spotted grouper (*Plectropomus* spp.) sell for US\$42 per kg; the rest around \$20 per kg.

In 1997, Hong Kong consumed 28,000 tons of live fish. About 35% by weight and 50% by value were groupers.

## Singapore

Singapore with a population of only about 3 million does not constitute a significant market for fishery products. But it is important as a transshipment base for fishery products within and outside Southeast Asia. A substantial portion of the imports constitute reef fishes, including groupers and snappers. Imports are mostly delivered at Jurong Market.

Licenses for imports, exports and transshipment have to be obtained from the Fisheries Division of the Primary Production Department.

## Market study

Australia's Queensland Department of Primary Industries assessed the potential of developing the reef fish aquaculture industry in Queensland in 1995-1996. Its major conclusions are found below:

- With increasing population and growing affluence in Hongkong and southern China, the market for live seafood, including groupers and snappers, seem set to increase. Prices are forecast to increase steadily in the next six years. It appears unlikely that this demand can be fully met by capture fisheries, particularly in view of the widespread environmental damage caused by unsustainable fishing techniques. Increasing demand for live reef fish will have to be met by aquaculture
- R & D costs for development of reef fish aquaculture industry are high, but returns are also likely to be higher, and the industry should be highly profitable. The main constraint is the difficulty associated with producing large numbers of fingerlings for grow-out. This aspect is specifically targeted in R&D programs

The market analysis, which concentrated on Hongkong and southern China, estimated Hongkong's total seafood market at over 220,000 tons per year. The current market for high quality live reef fish is estimated at 1,600-1,700 tons per year.

Assuming that the Hongkong and the Chinese economies continue to expand at the current rate, both demand and price will expand in the immediate future. Compound growth rates in excess of 12% are forecast, indicating that the market is expected to double every six years.

## Transport tips

Since transport of live fish to markets hundreds of miles away is stressful to the fish,

it deserves special attention. Below are some tips in transporting and marketing live groupers.

- Plan operation to minimize delay in transit
- Select only healthy animals
- Keep the animals well aerated, the higher the density, the higher the need for oxygen
- Condition the fish prior to transport to reduce stress. Fish should be starved at least 24 hours prior to transport. The larger the fish the longer it needs to clear its gut. Water temperature in the holding tank should be reduced by adding ice. Temperature reduction should be ideally less than 5°C per hour and should be brought down to not less than 18°C. Ice should be contained in a plastic bag to prevent dilution of seawater when it melts
- Use sealed double polyethylene bags for packing live groupers. Put just enough water in each bag to avoid extra weight. Place bags in an insulated styrofoam box where sufficient ice are added to control rise in temperature
- Determine airline requirements for shipping or air freighting live fish. Generally, gross weight of the pack should not exceed 20 kg
- Label the packages properly: LIVE ANIMALS, THIS SIDE UP.

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